BIOTICS Field Form Information

An Element Occurrence (EO)O can be made up of:

- SINGLE SOURCE FEATURE or
- MULTIPLE SOURCE FEATURES

Therefore, an EO can have more than one SOURCE FEATURE TYPE (Point, Polygon,or Line). Each SOURCE FEATURE must be treated separately and run through the Biotics Charts.

EO observations:	**Single Contiguous Thing**	**Non-Contiguous Thing**	
Mapping Decisions(s)	Is this the only part of the EO that I found during this survey?	Can I justify mapping every non-contiguous part of the EO?	Can I justify mapping a polygon around all the separate parts of the EO?
Examples	• Single patch of plants • Single Contiguous Communtiy	• patches of plants separated by inappropriate habitat within a 0.5 sq mi area. • 3 nest locations within a single territory	• Separate patches of plants occurring throughout a field. • Fish seen at different points along a continuous stretch of creek.
Single or Multiple Source Features	Single Source Feature	Map as Multiple Source Features	Map Single Source Feature

More on Areal Estimated Source Features:

As indicated in the charts above, field staff provides data management with:

- **Point, line, or polygon representing the area that the EO covers (EO Source Feature)**
- **PLUS an Uncertainty Distance, representing the locational accuracy of the EO Source Feature.**

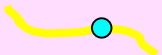
You can either choose a range from the table below, or indicate a custom length in a specified unit of measure.

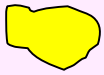
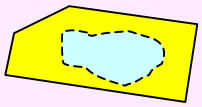
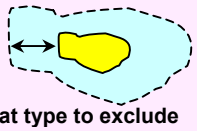
LOCATIONAL UNCERTAINTY DISTANCE (RADIUS) RANGE: ESTIMATE ONLY FOR **AREAL-ESTIMATED**	
____ >6.25 – ≤25m	____ >400 – ≤800m
____ >25 – ≤50m	____ >800 – ≤1500m
____ >50 – ≤100m	____ >1500 – ≤4000m
____ >100 – ≤200m	____ >4000m
____ >200 – ≤400m	____ Custom:

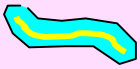
If the resulting polygon (Source Feature plus Uncertainty Distance) includes unsuitable area, that area can be clipped out. It is helpful to indicate this to data management. For example, if the habitat is aquatic, indicate that terrestrial area should be clipped from the polygon.

Using the Source Feature Charts on the following pages, fill out the following fields for each Source Feature you Find for an EOR:

Field	Definition	
Source Feature Label	Make descriptive label for each source	
Feature Type (What best describes shape of the Source Feature)	• Point • Line • Polygon	
Locational Uncertainty (How certain are you that you mapped the Source Feature where it is in reality?)	• Negligible • Linear • Areal Delimited • Areal Estimated	
Locational Uncertainty Distance (for Areal Estimated Only)	Distance + unit of measure Use either a pre-defined or custom distance	
Locational Class Use (animals)	• Breeding • Non-breeding • Migratory Stopover • Migratory Corridor • Staging	
Digitizing Base (what map type did you use to map this?)	• 1:24,000 Topo Map – paper • 1:24,000 Topo Map - digital	
Digitizing /Mapping Comments	Describe how you mapped this feature: • GPS'd end points only • GPS's each patch of plants • Delineated with Aerial Photos • Eyeballed topo map	
Size of Observed Feature (How big was the EO within the Source Feature?)	Area / length of Observed EO	
Observer	Surveyor's Name & Sourcecode	
Date Observed	Date you observed the EO	

Observed Feature *The extent of the EO*	**Small Area** ***(Less than 12.5 meters in all directions)*** 			
Conceptual Feature	**Point**			
The basic shape of the Observed Feature (EO)	*Examples:* • *Single or small patch of plants* • *Herbarium / museum specimen* • *Single roadkill,* • *Single Moth Trap* • *Single Occupied Nest*			
Locational Uncertainty	**Negligible**	**Linear**	**Areal Delimited**	**Areal Estimated (best guess)**
How sure are you that the EO is mapped where it really lives?	*Within 6.5 meters of the Eos actual location*	*Based on linear features of a map.*	*Somewhere within a delimitable area*	*The potential area in which you can say the EO is occurs. Use when you have no other options.*
Examples	*-GPS'd point of a plant in meadow* *-Nest occurring at a trail & stream intersection*	*-single mussel found between bridge A & Bridge B*	*-single fish found in lake* *-patch of plant found in woodlot*	*-plants found on hillside place point on hillside (best guess) and buffer to appropriate uncertainty distance.*
Estimated Uncertainty Distance	**NONE**	**NONE**	**NONE**	**Distance in which you can be sure the EO is found.**
Source Feature =  ***(what to give data management)***	**POINT** 	**LINE = linear area that contains the EO.** 	**POLYGON = area that contains the EO** 	**POINT + uncertainty distance**  List any habitat to exclude from areal estimated poly

Observed Feature ***The extent of the EO***	**Large Area** ***(Greater than 12.5 meters in all directions)*** 		
Conceptual Feature	**Polygon**		
The basic shape of the Observed Feature (EO)	*Examples:* *- Large pond occupied by dragonflies* *- Contiguous community* *- Large field covered by threatened plant.* *- Park boundary*		
Locational Uncertainty	**Negligible**	**Areal Delimited**	**Areal Estimated (best guess)**
How sure are you that the EO is mapped where it really lives?	*-Polygon boundaries follow features on topo map* *-GPSed area* *-Footprint of an aerial photo*	*-Large Area EO found somewhere in an even larger area that can be delimited from map.*	*-Potential location of a Large Area EO. Use when you don't have any other options.*
Examples	*-Fish found throughout lake* *-GPSed area of rare orchids* *-Forest Community surrounded by fields*	*-Wetland found within forested lot* *-Patch of plants within a field*	*- 20 acre patch of plants in northern area of SGL 53 (draw EO polygon in northern area and buffer to appropriate uncertainty distance)*
Estimated Uncertainty Distance	**NONE**	**NONE**	**Distance in which you can be sure the large area EO is found.**
SOURCE FEATURE =  (What to give Data Management)	**POLYGON = area of EO only.** 	**POLYGON = delimited area in which EO is contained)** 	**POLYGON + Estimated Uncertainty Distance = potential area of EO.**  **List any habitat type to exclude from areal estimated polygon**

Observed Feature ***The extent of the EO***	**Linear area** ***(Greater than 12.5 meters in one dimension)*** 			
Conceptual Feature	**Line**			
The basic shape of the Observed Feature (EO)	*Examples:* *- Narrow stretch of stream* *- Narrow stretch of pond shore* *- Ridgline* *- Trail* *- Transect* *- R-O-W*			
Locational Uncertainty	**Negligible**	**Linear**	**Areal Delimited**	**Areal Estimated (best guess)**
How sure are you that the EO is mapped where it really lives?	*-linear EO follow features on topo map on both ends.* *-Length of linear EO is GPSed from start to finish*	*-linear EO follows linear feature, but not found throughout.*	*-linear EO found somewhere in a larger area that can be delimited from map.*	*The potential area in which you can say the EO is occurs. Use when you have no other options.*
Examples	*-Podostemum found throughout stream from bridge A to Bridge B* *-Plants found along trail through a field. GPSed the section containing plants.*	*-20 meter stretch of Podostemum found in small stream somewhere between Bridge A & Bridge B* *-10 ft of plants on N-side of lake shore (draw line on north shore of lake)*	*-20 ft stretch of plants somewhere in field (digitize whole field)* *-plants on shoreline of lake (digitize whole lake)*	*-mussels found in Susquehanna River near Marysville (draw line in west side of river; buffer with appropriate uncertainty distance)*
Estimated Uncertainty Distance	**NONE**	**NONE**	**NONE**	**Distance in which you can be sure the linear eo is found.**
Source Feature =  **(what to give data management)**	**LINE = area of EO only** 	**LINE = area contains the EO** 	**POLYGON = area that contains the EO** 	**Line = draw line, then indicate the uncertainty distance**  List any habitat to exclude from areal estimated poly